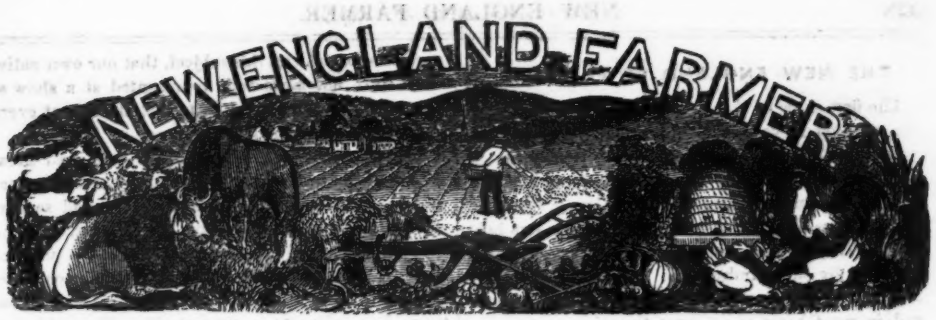


DEVOTED TO AGRICULTURE AND ALL ITS KINDRED ARTS AND SCIENCES.

Agriculture not only gives riches to a nation, but the only riches she can call her own.—JOHNSON.

VOL. II. SATURDAY, NOVEMBER 23, 1850. NO. 24.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

PROFIT OF COWS—USE OF ICE—STEAM ENGINES FOR FARMERS.

MR. JOHN DAY, of West Boxford, has communicated to us the following facts in relation to the profit of cows. Their publication may assist some, who contemplate embarking in this business, in making their estimates on expense and income; and others, who now attend to the dairy business, may from these facts gain some aid by way of improvement.

Mr. Day keeps fourteen cows, and the principal dairy product is butter. He estimated the amount at one hundred and fifty pounds to each cow, for the season. When we saw him, a few weeks ago, it lacked but a few pounds, to each cow, of this amount. He has sold his butter in Lawrence, at twenty cents per pound through the season; this is $30 to each cow. He sold his calves at $5 each, making the income $35 to each cow. The pork made from the milk, and the pigs raised on it, were worth from $80 to $100. Mr. Day supposed that this sum would hardly be sufficient to pay the expenses of taking care of the dairy. The manure from the cows would pay the expense of taking care of them, including that of milking.

Mr. Day reckons the expense of wintering his cows, whether he feeds roots, grain, or other food, equal to two tons good English hay, each, which is worth, with him, on an average, about $10 per ton. The usual price of pasturing is $6 for the season. In the fall, when the feed fails in his pasture, he turns his cows on his mowing fields, not having provided green corn or other food to make up the deficiency in pasturage.

Mr. Day has not lost any cows for fourteen years. He fattens and turns off for beef some cows every fall, and keeps his stock good by purchasing heifers that were two years old the spring previous, that are with calf, and so forward that he can make a sure calculation. He has convenient opportunity for purchasing, as many droves of eastern cattle pass near him, and are kept over night near his residence. As he sells his cows considerably higher than the price of the heifers he buys, — nearly enough higher to pay the expense of fattening his cows, — it costs him but a little to keep his stock good.

The room in which the milk is set, the churning done, and the butter worked, is kept at a temperature of 62°, as indicated by a thermometer suspended in the centre of the room. This is effected by the use of ice, which costs but little, as an ice-house is filled for this and other purposes in the family. Ice water is used generally for drink, as it is regarded as more pure and wholesome than other water, especially in time of drought, when the water in wells and springs is frequently but slow drainings from the soil, impregnated with various unwholesome substances. When the weather is cool and clear, the windows of the dairy-room are opened for ventilation.

Mr. Day uses tin pans, and he fills them only two and a half inches deep with milk. He churns three times a week during the warm season. He usually churns himself, and he does not wish for the butter to come in less than an hour, as he thinks that he gets more and better butter than by rapid churning, or any process that would produce butter in a few minutes. This is a sad commentary on the wonderful inventions for churning, for which great excellence is claimed because they will produce butter in a few minutes.

It is the intention of Mr. Day to have a steam engine for churning. He now has one of four-horse power, for mechanical purposes, when water is low, (but too far from his house to use in churning,) that a boy fourteen years old can safely manage, which requires only twenty cents worth of fuel per day to run it, as he uses cheap kinds of fuel. If he used that which is merchantable, it would cost about fifty cents per day. He intends his steam engine for various other farm purposes, such as sawing wood, &c.

Mr. Day made an ice-house eleven feet square, and seven feet high, at an expense of $25. It holds about twenty-five tons; and three hands, with two pairs of oxen, will fill it in two days. He takes the ice from a mill pond near by.

If farmers knew the great utility of ice, and the small expense at which ice-houses may be built, this luxury, which is becoming one of the necessaries of life, as it becomes well known, would be common among farmers, and contribute largely to the excellence of dairy products.

THE NEW ENGLAND FOWL SHOW.

The first show of the New England Fowl Association came off November 12, 13, and 14. The weather preceding the show, and during the exhibition, as well as the succeeding day, on which there was a sale by auction, was most delightful, being clear and remarkably mild for the season. The show was held under Wright's mammoth tent, that is two hundred and fifty by one hundred and fifty feet. This large area was generally well filled with coops and cages, and in most cases there were two tiers, and sometimes more. The whole arrangements seemed well made, and creditable to the officers of the society, who had the management of the exhibition.

This show was a grand one in very deed, probably never half equalled in extent by any similar exhibition of any country, in any age; and in variety, we believe that it was never rivalled by any excepting that of Noah in the ark. There was almost every breed that we have ever seen, heard of, or read of, and numerous new varieties which some, before they saw this show, never dreamed of; for nowhere on the face of the earth are people so prone to mix up various breeds of animals as they are in New England: hence a great many new crosses are formed.

The whole number of fowls and birds, including *rabbits* and *guinea pigs*, was probably not far from six thousand. We counted them carefully on the third day, in the forenoon; and allowing that eight or nine hundred had been taken out, (which is rather a liberal allowance,) the whole number was about six thousand. This is surely a large number, a grand collection of the feathered race, and ought to satisfy those who feel a deep interest in the success of the affair; and we do know that the frequent statement of the number at fifteen thousand is a great exaggeration, and not to be relied on, though it receive official sanction. This seems like some publishers of newspapers, representing their lists of subscribers to be several thousands higher than reality.

But to return to the fowls, and leave people to crow as they please: it was a most delightful show, as vast in extent that one got tired of seeing; and so various that he soon got lost in comparing, and endeavoring to estimate properly, each lot in so great and various a collection. There were fowls of every size, from the beautiful little Bantam that weighs only a few ounces, to the majestic Shanghae, and other large breeds, that weigh from ten to fifteen pounds. In this collection the large breeds preponderated, not only in weight, but in numbers. Some of these large races that have been kept several years in this country, and skilfully managed, are receiving improved forms.

So far as uniformity of appearance, in many respects, and beauty, is concerned, also in large size, many of the foreign breeds are superior for the amateur and fancier; but for profit in laying a good lot of good-sized eggs, and furnishing a large number of chickens of excellent flesh, many of our common native breeds or varieties still rank among the best; and we regret, as may be well supposed from our previous remarks on this subject, that our own native fowls were not more fully represented at a show so extensive and so various as to include almost every variety of foreign fowl.

Yet the show was a magnificent one, and great good will grow out of it, and out of the excitement that has prevailed to so great a degree, and so constantly for a long period. People will learn, from the deep attention to the subject, what fowls are the most valuable and the most beautiful; common sense will finally prevail, and each breed will be estimated according to its true merits. The subject is worthy the attention of every citizen, whether he be a producer for profit, or a fancier who gratifies a commendable taste for the beautiful and useful, or a consumer, who is particularly interested in the good quality of the flesh and eggs of fowls. Therefore we all have cause to rejoice at the success of this great and useful enterprise, and that a fever so conducive to healthy action on this subject has universally prevailed.

NEW BEDFORD HORTICULTURAL SOCIETY.

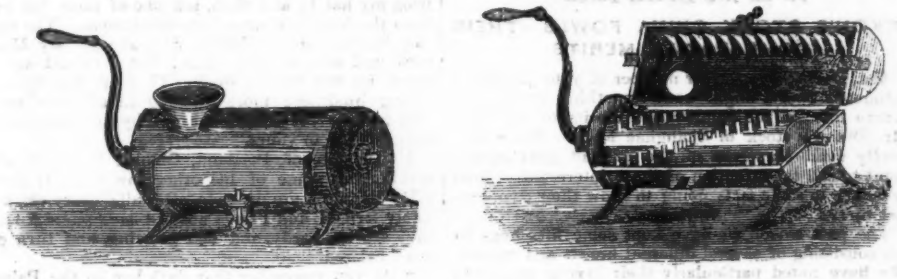
Henry H. Crapo, Esq., chairman of the fruit committee, has politely furnished us with the reports of the annual exhibition of this association. They show that it was large and varied, and indicate that this society, though in its infancy, is in a very flourishing condition. From the long list of contributors, and the variety of fruits generally shown by each, it appears that in extent and variety this exhibition must have compared well with the best shows in the country. We copy the following from the report of the committee on fruits:—

The committee, in presenting their annual report, are much gratified in being able to say that the show of fruits on the occasion exceeded that of any former exhibition, and bore ample testimony to the favorable results which have thus far attended the labors of the society.

The display of fruits, and more particularly of pears, was very fine, notwithstanding the present season has been an unfavorable one for the growth of most kinds of fruits; and especially when the limited means of the society is taken into the account.

Of pears, there were nearly one hundred different varieties upon the tables, embracing most of the really desirable kinds now cultivated. Many of them were truly magnificent in appearance, being very large and fair, and bore evident marks of good culture in a congenial soil. Of other fruits, the show, as formerly, was limited, very little attention having heretofore been given to their culture, although in this respect there was evidently an improvement upon former exhibitions. From the exhibition as a whole, the committee are encouraged to hope that the efforts of the society to advance the cause of pomology by increasing a love, and diffusing a taste, for the culture of choice fruits, will be attended with abundant success.

Happiness depends on the mind, not on any external circumstances.



SAUSAGE OR MINCING MACHINE.

This is a small, compact machine, remarkably strong and durable, as it is made wholly of iron and steel. It works with ease and rapidity, and is very effectual in its operation, performing its work in the best manner. We would recommend, to those persons engaged in the manufacture of sausages, an examination of this machine.

Such is the competition in almost every branch of manufacture, that it becomes necessary for the operative to avail himself of every species of labor-saving machinery. This is true economy, and this cardinal virtue is essential to success.

This machine was formerly constructed mostly of wood; but recently a great improvement has been made by Ruggles, Nourse, Mason & Co., by making the case and cylinder of iron, so that it is now wholly composed of the most durable materials.

The cut on the left represents the machine closed, as it is in operation. That on the right represents it thrown open, exposing the cylinder with its cogs, and the knives. The length of the machine is about fifteen inches, the width eight, and the height about the same. The cylinder can be conveniently removed from the machine for the purpose of cleaning it.

The inner part of the machine forms a barrel, in which is a cylinder with three rows of pegs. The meat is placed in the hopper, and it passes between the cylinder and the case, and is then forced by the pegs against the rows of knives, when it is quickly minced, and it passes onward, tending to the end opposite the hopper, by the spiral form of the rows of pegs, where it is discharged. The strength of a man is amply sufficient for turning it. The price is $12.

BILBERRY, OR SWAMP PYRUS.

In regard to the article on the bilberry, on page 346 of this volume, Dea. S. P. Fowler, who is a nice observer of trees and shrubs, thinks that the inquirer M. is mistaken as to the name of the shrub in question, as it is probably the Swamp Pyrus; called also June Berry, Shad Bush, and Sugar Pear. This has sometimes been used with success as a stock for the pear. We have had fine specimens of the Bartlett pear raised on it. Whether it can be used to advantage in this way to much extent, has not yet been ascertained.

WRONG CREDIT. — The article "Prepare for Winter," which has recently appeared in several papers, credited to *Deckertown Home Journal*, made its first appearance in the N. E. Farmer, last November. — How did the Journal manage to get the credit of it?

FEATHER BEDS.

The want of feathers is altogether artificial, arising from a disregard of the physical and moral well-being of infants and children; and he who has the good fortune never to have been accustomed to a feather bed, will never in health need or desire one, nor in sickness, except in cases of great morbid irritation, or excessive sensibility, or some disease in which the pressure of a firm or elastic substance might occasion pain. But when a rational regard to the preservation of health shall pervade the community, feathers will no more be used without necessity or medical advice, than ardent spirits will be swallowed without the same necessary advice. The physician has frequent occasion to see persons who are heated, sweated, enfeebled, by sleeping on feathers, as if from a fit of sickness; enervated, dispirited, relaxed, and miserable. — *Medical Intelligencer.*

ASSAFŒTIDA.

This article is obtained from a large umbelliferous plant growing in Persia. The root resembles a large parsnip externally, of a black color; on cutting it transversely, the assafœtida exudes in form of a white, thick juice, like cream, which, from exposure to the air, becomes yellower and yellower, and at last of dark-brown color. It is very apt to run into putrefaction; and hence those who collect it carefully defend it from the sun. The fresh juice has an excessively strong smell, which grows weaker and weaker upon keeping; a single drachm of the fresh fluid smells more than a hundred pounds of the dry assafœtida brought to us. The Persians are commonly obliged to hire ships on purpose for its carriage, as scarcely any one will receive it along with other commodities, its stench infecting every thing that comes near it. — *Scientific American.*

For the New England Farmer.

DIXON'S STOCK CHINA FOWLS—THEIR COMPARATIVE MERITS.

Mr. Cole: In a former number of your journal, I intimated that I might have something to say, in a future one, of the comparative merits of the Hon. Mr. Dixon's stock of Shanghae fowls. We would gladly avail ourselves of the present fowl excitement to call the attention of those interested in fowl breeding to some facts going to show their comparative merits.

The past season we have kept some fifty hens in all, consisting of several different breeds and crosses. We have noted particularly their laying qualities; and are now prepared to state, that we have no hens that have laid as well as those of Dixon's stock of China fowls and their crosses. Next on *our* list stands the Dorking and Dominique fowls. Of the former we had only two hens, and of the latter some half dozen. We had also one pair of Forbes's stock of Shanghaes, but none of Marsh's stock. Hence we cannot speak from personal knowledge of the laying qualities of the latter; but my Forbes hen, although she laid tolerably well, has by no means equalled my hens of the Dixon stock. I am aware that it would be injustice to the Forbes stock to conclude, from the number of eggs laid by this single specimen of that stock, that they are not as great layers as Dixon's stock; but we propose to give extracts from some voluntary letters, received of A. H. Gilman, Esq., an ardent fowl amateur, of Portland, (to whom we sold a number of the Dixon stock,) which go to confirm the opinion we entertained from our own limited experience.

In a letter bearing date of June 24, 1850, Mr. G. says, "My poultry yard flourishes grandly; and as for your stock, it cannot be surpassed in any point. The six hens began to lay the day after they came, and I don't think they have missed a day up to last week, when three wished to sit. As I had a choice lot of their eggs, I set them. They have been perfectly healthy in every respect.

"One thing I wish to mention in regard to your stock: They take care of themselves better than any fowls I ever saw. They are regular in their hours for laying and roosting, and make little or no noise. I would sooner lose any three of my other stock than one of yours. * * * I am keeping a regular account of each stock, as to laying, feed, &c., which, if you care to see, some six months hence, I will forward. * * * My yard contains now Palmer's [Dixon's] Shanghae, one cock, six hens; Marsh's do., one cock, one hen; Forbes's do., one cock, six hens; Cochin China, one cock, three hens."

In a letter of June 27, speaking of some White China fowls of the Dixon stock, which I was about to send him, he remarks, "If they only arrive, and flourish as the Palmer's do, I shall be too glad. * * * I never saw finer looking fowls than yours."

In a letter of July 10, acknowledging the receipt of the White China fowls, Mr. G. says, "The Palmer importation flourish very well, and at the present time four of them are sitting; one nice brood of Palmer's came out three days since, and one is coming to-day. *Every* egg has hatched thus far."

Under date of September 13, Mr. G. says, "The White Shanghaes are doing well. Both hens are with chicks," &c.

"In fact, all the fowls (with the exception of my Marsh cock and hen) that I have had of you are different from my other breeds. Take your Palmer stock, for instance; they are gentle, regular in their habits, never interfere with the chickens that have the same yard. They are also very tame—will all eat from my hand; and then, not one of them has ever been the least sick since I received them. The same can be said of the White Shanghaes. My Marsh cock and hen are the same; but I cannot say as much for the Forbes stock. They are not equal in laying qualities; more *bungling* in all their ways. The male is very large, but not by any manner of means equal to yours."

Under date of Portland, October 18, 1850, after speaking of some of his other fowls, he remarks, "My Palmer's are my pets, after all; every chick is finely formed, and I have not lost *one* from sickness; they are all hardy, and fast growing, and turn out fawn-colored.

"Do you remember that dark hen in the Palmer breed, that you sent me? She has laid over fifty-five eggs, brought up two broods, and now I have sat her again. That speaks well, don't it?"

It seems to devolve on me to relate what that hen did before sending her to Mr. G. I believe she laid about thirty eggs, and, to my knowledge, sat six weeks, hatched two broods, which were given to other hens, the last a few days prior to sending her to Mr. G., which was on the 5th of June. Had I time and room, I might relate other striking facts that have occurred, adapted to show that it would be very difficult, if not impossible, to find greater layers or sitters.

The size of the Dixon stock of Shanghae fowls, we believe, is equal to any of the late importations. The roosters will weigh from eight to twelve or thirteen pounds, and the hens from six to nine. In fact, Mr. Dixon states that it is his impression that he weighed one pullet whose weight was ten pounds.

The name by which this stock is generally designated east of Westerly is Shanghae; whilst at that place, and still west, it is generally denominated China, or Cochin China, probably from the fact that most of them have but few or no feathers on their legs.

A part of this stock is the same, in my opinion, as that received by the Queen, and imported by Mr. Burnham, under the name of Cochin China. This, we think, is demonstrable from the color of the eggs and fowls, and their form, general appearance, and characteristics. We were strongly inclined to this opinion before we saw Mr. Burnham's fowls, but that fully confirmed us in that opinion. The fowls of Mr. Burnham, denominated Royal Cochin China, had it not been for the card on his coops, we should have taken as fine specimens of the Dixon stock. Should any one doubt it, he is requested to call and examine some of our own specimens of the Dixon stock. In fact, Mr. Burnham says that the form of his fowls "resembles that of our best bred Shanghaes; and my opinion strengthens, with a further acquaintance with both, that the two varieties sprang from the same original stock. My Cochin Chinas" he adds, "are clean-legged; the Shanghaes, *feathered*," &c.

We will only add the opinion of that celebrated fowl amateur, Dr. Eben Wight. In a letter under date of Boston, May 23, he says, "I am strongly inclined to the belief that many of the Shanghae fowls which have come out (meaning those with *smooth* legs) are from the same stock as were those received by the Queen, under the name of Cochin China. For instance, Marsh has two varieties; the cock is feather-legged, as well as were some of the hens; but his *best* hen, very dark-plumaged, smooth-legged, was probably from the same stock as were the famous Cochin Chinas. That best hen has laid one hundred and seven eggs in the last consecutive one hundred and fourteen days."

Again, speaking of Dixon's stock, he adds:—"Whether white or red, they are very fine in form, and here have proved very prolific." He also gives

it as his opinion, that Dixon's stock and Marsh's "are *among* the best, if not the best, ever imported into this country." In this opinion of Dr. Wight we most heartily concur, for our own experience has led us to believe that there has been no better stock imported into this country than that of the Hon. Mr. Dixon; and we presume that a part of Mr. Marsh's is the same. Many who have that stock speak of it in high terms.

In conclusion we ought perhaps to state, in justice to the stock, and to prevent imposition, that it is very difficult to obtain the pure stock, even in the immediate vicinity of Mr. Dixon; and I am confident that much that has been sold in Boston and elsewhere as pure Palmer or Dixon stock * has been almost any thing else. This is emphatically the case with the White Shanghae, or those sold for that fowl.

CHAS. H. PENDLETON.

PENDLETON HILL, *Oct.* 31, 1850.

For the New England Farmer.

EFFECTS OF FOOD ON MILK.

MR. COLE: I wish to make some inquiry, through the medium of your valuable paper, concerning the method used by the dairymen who use carrots and other roots as feed for milch cows. Now, with me, there is a difficulty which I have hitherto been unable to overcome in this matter. I can taste the feed in the butter. If the cows are allowed to feed on lands where leeks grow, the milk is scarcely fit to feed to hogs. Moreover, if the cows are allowed to feed in the swamps, then something combines with the milk, we know not what it is, and the butter is neither fit to eat or sell. We have sometimes allowed our cows to feed on turnips, cabbages, and carrots; but I can always taste the food given to the cows in the butter, except when they are fed on Indian meal, pure grass only, or hay clear from weeds.

I frequently read of good dairy people living near the cities, and I understand they make great use of roots to feed to cows in milk, as well as other stock; and I hear of no complaint of the effluvia communicated to their butter, or even the milk, where there is so much sold every day in the year. Am I mistaken? I think I can most certainly taste any thing in butter that ought not to be found there. Is there any way to prepare roots so as to prevent them, when fed to cows, from communicating any disagreeable or unpleasant flavor to the milk? If so, why do not some of the wise ones speak out, and let the public know about these matters? Or have they done so, and I not observed it?

We believe our agricultural editors know a great deal about such matters; and we are inclined to look to them for information on agricultural subjects as we would to Webster's Dictionary for the true diffinition of words.

Respectfully yours,

JOHN M. WEEKS.

WEST FARMS, near Middlebury, Vt., *Nov.* 1, 1850.

P. S. Please inform me where a few pure Alderney cows may be found.

REMARKS. — The subject here presented is one of great importance both to the farmer and consumer; and we hope that some of our correspondents will attend to it, and prescribe some remedy or abatement of the evil complained of, and show what kinds of food are most desirable for milch cows, otherwise than the common and staple articles, good sweet grass and hay.

* We have designated the first importation of Capt. Palmer by Dixon stock, in order to distinguish it from a recent importation by his brother.

For the New England Farmer.

CARBONATE OF LIME.

MR. EDITOR: I have heard it stated that a mill was soon to be set up at North Adams, Mass., for the grinding of common marble. It is claimed for the carbonate of lime, that it is as good a fertilizer as the sulphate. Will you, Mr. Editor, inform us, if common marble, reduced to powder, possesses any value as a manure? and if so, what is the philosophy of its action upon vegetation?

STONINGTON

SALE OF FINE STOCK.

An account of the recent sale of the excellent stock of the late Mr. William Stickney, at Westminster, Vt., may be interesting to many of our readers. We copy it from the Montpelier Watchman. It was marked for an earlier number, but it was mislaid.

At this sale, about seven hundred and fifty farmers, stock breeders, and gentlemen amateurs, representing every New England state and the border counties of New York, were gathered together at one o'clock precisely, on the afternoon of the 9th instant, at the quiet and beautiful little village of Westminster; and five minutes afterward the first animal offered (Jessica, seven years old, a full blood Devon, from the Patterson herd) was struck off to Col. Lewis G. Morris, of New York, for $125.

The following are the prices for which some of the sales were made: —

Bulls and Bull Calves. — William IV., a full blood Devon, seven years old, $90. Duke of Devonshire, a full blood, $70. Comet, full blood, imported, two years old, $270. Boz, five months old, $25. Dandy, four months old, $10. Red Jacket, three months old, $25.

Cows. — Juno, nine years old, half Creampot and half Durham, $42 50. Lady Anne, nine years old, half Creampot, one fourth Devon, one fourth native, $47 50. Jessie, seven years old, full blood Devon, $125. Stately, four years old, half Creampot, half Devon, $50. Delight, four years old, half Devon, half native, $40. Star, four years old, three fourths Devon, one fourth Creampot, $75. Gypsy, seven years old, half Devon, one fourth Creampot and one fourth Durham, $87 50. Beauty, three years old, $57 50. Lady Anne, three years old, three fourths Devon, one fourth Creampot, $57 50. Cherry, three years old, $57 50. Belinda, three years old, half Devon, one fourth Creampot and one fourth Durham, $70. Cream Cup, three years old, $57 50. Lady Jane, three years old, full blood Devon, $107 50. Dido, a full blood, same breed, $95. Flirt, four years old, $62 50.

Two-year old Heifers. — Jeannie Deans, $65. Kathleen, $57 50. Fashion, $57 50. Jessie, a full blood Devon, $160. Annette, $62 50.

Yearling Heifers. — Butter Cup, $105. Jessamine, $150. Belle, $40. Dairymaid, $400. Frolic, $57 50. Gazelle, $42.

Heifer Calves. — Fanny Elsler, $31. Fancy, $16. Bessie, $22. Jessamine, $150.

Steers. — One pair, four years old, $100; one pair, three years old, $80; one pair, one year old, $66.

Sheep. — Mostly South Downs, from $16 to $18.

Swine. — All the way from $15 to $80, mostly of

the Suffolk and Middlesex breeds. One Suffolk sow, $80. One sow of the Middlesex breed, $70. Pigs six weeks old, $11.

Mr. G. F. Whitney, of this village, purchased one of the full blood Suffolk, imported by Mr. Stickney in 1847, which weighs 450 pounds, and may now be seen at his stable.

THE PRINCIPLE ON WHICH PLANTS ARE PROPAGATED BY CUTTINGS.

The propagation of plants by cuttings is an operation of frequent use, and of considerable importance in all horticultural establishments. The many thousand plants that are annually propagated to embellish flower-gardens and pleasure-grounds, and the taste displayed in the arrangement of colors, demand the greatest skill, vigilance, and forethought to prepare, to arrange, and to provide for the display.

The conditions necessary for the propagation of plants by cuttings are, a certain portion of organized matter, the assistance of leaves, a degree of heat and moisture accordant with the nature of the plant, and free drainage at the roots.

When the ascending sap reaches the leaves, the water is discharged through the minute invisible pores, and by the decomposition of carbonic acid gas, which separates to carbon, and sets the oxygen free, a vital action is performed, by which the sap is changed into the organic matter, or descending sap. It is then that all parts of the plant are supplied with a store of organized matter, which renders the parts fit to be employed as cuttings. When removed from the parent, that store, under proper management, will enable them to put forth roots and new leaves, and develop all the parts required for the growth of the plant. If the shoots are in a rapid state of growth, full of rising sap, their tissues lax and not matured, failures may be expected to attend all attempts to propagate them by cuttings.

The next part of the subject is to inquire in what manner the leaves retained on the cuttings assist the protrusion of roots, and the development of other leaves.

As the removal of the cuttings from the parent branch will make no change in the nature of the sap, which is always more or less in circulation in the whole system of the plant, and it is the office of the proper juice to descend in the cuttings to the joint at which it was cut; when its downward course is impeded, it accumulates there until a callus is formed, and roots are protruded; the organized matter of the cutting is diminished to supply the development of roots, and leaves are required to secrete more, to replace that which was expended in the formation of roots. It is when there is sufficient organized matter in the cutting to supply the roots, without exhausting its own vital energies, that the external assistance derived from the leaves may not be needed. — *Scientific American.*

NAMES OF PLANTS.

The importance of having all plants, including fruit-trees, properly named, even in small gardens, cannot be too clearly pointed out. A plant may have beautiful foliage and flowers, but without a name it yields comparatively little interest. Every plant has a history of its own, and the first step towards obtaining a knowledge of that history is its name; the next, its native country and year of introduction into our gardens. A garden of plants without names is like a library of books without their exterior superscriptions. Numbers are only useful to nurserymen. All garden plants should be properly named. The season of propagation is chiefly when plants are out of bloom, and the want of diligent care in retaining their names too frequently leads to a confused nomenclature. The vast numbers of new plants which are being continually introduced, as well as the host of garden varieties every year brought under the amateur's notice, are quite perplexing to him, unless constant attention to correct labelling is observed. Then, again, with regard to fruits, how much uncertainty would be removed by keeping labels of a permanent kind to every tree! Small gardens cannot, or ought not, to find room for indifferent kinds of fruit, or uncertain bearers; hence the importance and the advantage of knowing every kind we cultivate. How much trouble is thereby avoided! for it frequently happens that the difficulty and expense of obtaining the name of a single fruit are much greater than the attention necessary in keeping the names to the small collection which the limited space of a suburban garden admits.

With respect to the particular kind of label which is most desirable to employ, there is a good deal of uncertainty. Some persons prefer some of the new kinds now in existence, while others adhere to the old wooden label, which, after all, has not yet been very satisfactorily superseded; whatever kind of material is employed, however, the names should be accurately and distinctly written. — *Granite Farmer.*

Remarks. — The best mode that we have ever seen for marking trees, either on labels or stakes for nurseries, is that recommended in the American Fruit-Book, by cutting notches. These labels are easily made; the materials are always at hand; the system is so simple that a child will learn it in five minutes. By hanging the labels with wire, they will last twelve or fifteen years; and by writing the name on the label, it may be easily read, and the numbers by notches may be relied on when the writing has faded; and the name may be renewed occasionally, if necessary, as it fades, by whitling the label again and writing anew. It is the simplest, cheapest, most convenient, and most reliable mode for reading readily, and preserving the name permanently. — Ed. N. E. Farmer.

CULTIVATION OF CRANBERRIES.

The Barnstable Patriot gives a full account of the sixth annual meeting of the Barnstable County Agricultural Society, on the 16th ult. We select the following report: —

This statement of Mr. Edward Thatcher, of Yarmouth, was made to the Committee on Fruit.

The following is a statement of the course pursued by me in the cultivation of the cranberry. July 12, 1845, I purchased, for $40, one and a half acres of land — about one half a sandy beach, and the remainder a low peat meadow covered with water. A rim of about six feet in width, around the bog and between the water and the beach, had a few cranberry vines on it, which had been closely fed off. In the spring of 1846, I drained the bog and covered about one eighth of an acre with sand three inches thick, and set it with cranberry vines in rows two feet apart, and hoed them four times in the season of 1846, and once in the spring of 1847. The grass then got advantage of me, and I left the vines to work their own way. They have now nearly overcome and worked out the grass and rushes. On the remainder of the bog I strewed vines, and trod them in the mud, by walking over them. These grew with rapidity without

any further care except flowing in the winter. In the fall of 1848, I gathered from ten rods, where no sand had been spread, as many bushels of cranberries, while on the part sanded I had scarcely as many quarts. The latter are now doing better, having got the advantage of the grass, and I think will finally work it out. I have this year, on the quarter of an acre offered for premium, quite a good crop, although the worms destroyed nearly one half. I have picked one square rod of the light-colored variety, set in the mud, and it yielded two bushels and twelve quarts. One square rod of the small dark-colored variety, on the mud, yielded one bushel and two quarts. The large red variety yielded on the mud two bushels to the square rod. The whole quarter is not yet gathered; it will yield about thirty-five bushels, about one half of the vines being set on mud and one half on sand.

In selecting meadow for cranberries, it is highly necessary to select such as will not dry in summer; but much also depends on the selection of the vines, as the committee will see by the samples here presented, all having the same soil and the same treatment. The *samples are not selected, but sent in precisely as they grew.* The whole expense on the above bog up to the present time does not exceed $40.

I have received from the sales of cranberries, up to the fall of 1849, $320 00

Deduct for picking, one fourth	80 00	
All other expenses for setting, interest, &c.,	40 00	
		120 00
Net profit,		200 00

EDWARD THACHER.

YARMOUTH PORT, *Oct. 15*, 1850.

We know not why it is that so little attention is paid to the cranberry in this county. In the eastern part of the state it is considered a valuable crop, and one raised without difficulty. There is a great abundance of land in almost all our towns, and especially all those bordering on the Housic or Housatonic Rivers, well adapted to this fruit. Indeed, any ground which will produce corn, it has been said, will produce good cranberries. Still their native place seems to be in low grounds. That its cultivation is profitable, there can, as we think, be no doubt. Nor is there any danger of an over-supply. The price might become less, but improved methods of culture and implements for gathering would enable the article to be afforded at a lower price; and if that was the case, the consumption would increase with the supply. We should like to see some of the grounds which are now completely worthless producing their fifty or one hundred dollars per acre, in cranberries. We should like to see the hardhack give place to the cranberry, having the utmost confidence that it could not be less profitable. — *Culturist and Gazette.*

BEANS — HARVESTING CORN.

MR. EDITOR: Since my last letter, I have harvested my beans, and am now ready to give you my opinion of the best way. I pulled them when the leaves were quite green, and laid them on the grass sufficiently long to let the leaves wilt a little, and then hauled them in, and spread them on some poles, across the beams, directly over the barn floor. I spread them a foot thick, and when I got them down to thresh, I found them in good order. The beans turned out bright, and the vines were completely dried. I consider this much the best way to save beans. You not only avoid the exposure to rains and mildew, which they are liable to when stacked in the fields, but the vines, by being cured when a little green, retain their sweetness and make better fodder. Stacking them is a very good way, if rightly done; but after the labor is expended, what better are we off? they are still in the field. The labor of stacking them is enough to get them into the barn and put them where they will dry equally as well, if not a little better, than when stacked.

In regard to corn: much has been said, through the columns of your paper, about the best way to harvest it. I *have been*, heretofore, rather in favor of the old way of topping the stalks; but this year I let it stand until the ear was pretty well ripened, cut it up at the roots, and then got it into the barn and husked it. I think this the better way. Some stack it in the field after cutting it up. This is also a good way. The fodder is much better, and the corn ripens better, to let the top stalks remain. After husking, I stowed the stalks away as usual.

In writing the above, I do not pretend to say that my way is altogether the best — I express my opinion. Others may think differently, and perhaps have a better way; if so, let's have it.

F. A. A. K.

FAYETTE, *November* 2, 1850.

— *Maine Farmer.*

A MINE OF PAINT.

Yesterday forenoon we spent a short time very pleasantly in an examination of the paint mine, recently opened in West Springfield, by Skinner and Hancox, of this town. The substance from which the paint is obtained is a shelly stone, hard in its natural state, but affected like lime by the air. Ground fine, and mixed with oil, it forms, without other ingredients, a neat, durable, fire and water proof paint. The stone lies in diamond-shaped masses, and extends through four acres of a bluff on the bank of the Agawam River, opposite the Mitteneag factory. Two colors have been obtained so far — slate and freestone. The stone is entirely free from grit, and affords a paint one half or two thirds cheaper than lead. We have been shown some very handsome specimens of work done in this paint. An analysis of the stone by Prof. Jackson has resulted in a highly favorable report. — *Springfield Post.*

WORKING COWS — HORSES.

In France, it is not uncommon to see the cow performing, in the fields and on the roads, the tasks usually imposed on the males of her species. A few cases of the same have occurred recently in our own country, and the presumption is that the practice will, ere long, become quite common. The people of France assert — and the assertion is corroborated by the attestation of many Scotch farmers — that the cow, if properly managed, is capable of performing as much labor as the ox; that her motions are quicker, though her strength is less; and that she is seldom irritable or vicious under the yoke. But the French are a remarkable people. The Horse Abattoirs, Montfaucon, in Paris, — places where all sentiments of kindly commiseration and pity for these useful and valuable animals are utterly banished from the human breast, — show the *penchant* of the French for economy in a revolting light. A vast number of these animals, living and dead, are brought annually to those shambles, where they are mercilessly huddled together in enclosures so limited and confined as scarcely to admit of the slightest exercise, and not unfrequently without even an apology for food, or the blessings of rest or air. By an estimate compounded in the year

1827, it was ascertained that not less than thirty-five of these miserable animals were brought to Montfaucon daily, making a yearly aggregate of twelve thousand seven hundred and eighty-five! Of this vast number, upwards of three fourths entered the shambles alive. They are usually despatched by one of four methods; the first of which is by injecting air into an opened vein; the second, by severing the spinal marrow in the neck; the third, by felling with a blow on the head; and the fourth, and most cruel, by stabbing the victim repeatedly in the chest with a knife. Before slaughtering, the hair is removed from the neck and tail, and disposed of generally to the saddler and chair maker; the hides are sold to the tanners. In the year 1739, a previous ordinance was revived, prohibiting, under certain penalties, the sale of horse-flesh, in the Parisian markets, as human food; but during the revolutionary struggle, when the farming interests were in a depressed and languishing state, the scarcity of provisions was so great that horse-flesh was again used by most classes; and it is asserted that many, who partook of no other food for six months, received no injury whatever from its use. The aborigines of this country, however, who, during Philip's war, were, from their straitened circumstances, often compelled to live for weeks, and even months, on horse-flesh, appear to have experienced very different results.

"We have eaten horse-flesh," said an old warrior, who had fallen into the hands of the whites, "and now horse-flesh is eating us." By them it was generally deemed harmful, and was never partaken of as common food, unless from necessity alone.

In 1803, the open use of horse-meat ceased altogether in Paris, and mostly through France; but during the scarcity of 1811 many butchers again made sale of it, and the medical faculty having decided that the flesh of the horse, when uncontaminated or unaffected by disease, was a sound and perfectly healthy article of food, its open sale was once more sanctioned by a public law. But in 1814, this privilege was again withdrawn, but to be revived in 1816; and, "at this day," remarks a late writer, "horse-flesh is daily exposed for sale, with other animal flesh, in the meat stalls of the Parisian market." It is, however, supposed, on credible data, that a very large, perhaps a greatly predominating proportion of the horse carcasses of Montfaucon are used as manure, and for feeding animals; yet, notwithstanding this appropriation of large quantities, much is undoubtedly sold to the poor without their knowledge. All the workmen employed in the abbatoirs live wholly upon it, and are a singularly hardy and active set of men. "It probably," remarks a distinguished writer, "strengthens their nerves for their disagreeable business, as it spirited up our early ancestors of the north to their human butcheries." The use of horse-flesh as an article of food among the northern nations is demonstrated, by the existence of certain papal bulls, to have ceased upon their conversion to Christianity; but the people of Denmark appear to have recently recurred to their old habits, and are the first to have authorized the plenary sale of horse-meat among the ordinary articles of the market. The various parts of the animal are worked up, at Montfaucon, into oil, glue, and other articles of commerce; in short, the whole animal is appropriated to some use. Even the shoes go to the cutlers and ironmongers. It is a trade to gather the larvæ for fowls and animals. The camel is a valuable animal to the Bedouin; so also is the horse to the ingenious people of *la belle France*.

A COUNTY FARMER.

November 4, 1850.

Weeds exhaust the strength of the ground.

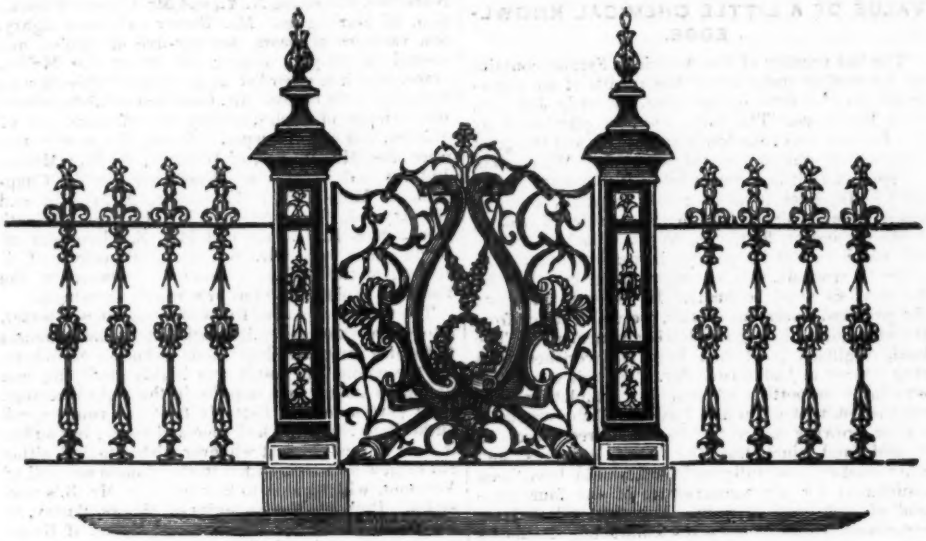
HIGH FARMING.

The English journals are filled with experiments of high farming, and all agree that fair remunerative profits can only be realized by such practice, while the political economists of England boldly assert "that the adoption of high farming alone will render legislative protection unnecessary." If this be true of England, why not with us? Has it not been proved that, by using full quantities of manure with thorough cultivation, better profits can be realized even with the first rotation of crops, than by the ordinary sluggish mode of farming? Are the farmers of New York and the adjacent states asleep, that they do not see from past experience what must be the result of longer continuing the exhausting process? Do they not know that one half of the farms of Virginia are worn out? that the wheat crop of Ohio is less than two thirds per acre what it was thirty years ago? and that the average wheat crop of New York is not more than fifteen bushels per acre? We have published that Dr. John Woodhull, of Princeton, has raised fifty-seven bushels of wheat per acre; that Allen Middleton, of Crosswicks, N. J., and many others, have raised one hundred and twenty-four bushels of shelled corn per acre; and indeed that all who pursue *high farming* properly are rendering their vocation profitable, in addition to rendering their land more valuable for future crops.

We are tired of hearing those who have neither tried nor investigated the truths of high farming assert that "*it costs too much.*" Those who have tried it know better; the excess of profits are always many times greater than the excess of expenses. A manufacturer who requires one hundred horse-power to turn his machinery, might as well do it by hiring men enough to perform the whole labor instead of using the steam engine, as for a farmer at this day to refuse the lights of science as applied to agriculture. We have visited many farms during the last three years, and advised modes of manuring, culture, &c., based on the chemical constituents of the soil, and we venture to assert that in every case the improved profits of any two acres would have paid our whole charge for services. Nor is it necessary that we should be employed; for every farmer who has an analysis made of his soil, and reads *The Working Farmer* attentively, is capable, without the advice of any one, to farm with profit. We should be glad to publish the English articles on this subject, but at this time they are so much mixed up with the local politics of the day, in which our readers have no interest, that we cannot use them.

We last year hired a piece of ground in our own neighborhood, which was worn out, and had refused corn. Last winter we made an analysis of the soil, and found it short of chlorine, phosphate of lime, soda, potash, and ammoniacal matter. We manured it this spring with a compost costing one dollar and thirty-one cents per acre. The chlorine and soda was supplied by common salt, the phosphate of lime, potash and ammoniacal matter by Peruvian guano, and the volatile matters of the compost retained by the use of charcoal dust and plaster of Paris. We have now a crop of corn standing on this land which will yield certainly more than fifty bushels of shelled corn per acre; and after measuring, we hope to be able to report a much larger crop, and think too without the proper preparation of the ground by subsoil ploughing, &c., as on our own farm. We invite our readers to visit us and see this field for themselves. — *The Working Farmer.*

When an implement is no longer wanted for the season, lay it carefully aside, but first let it be well cleaned.



ORNAMENTAL IRON FENCE.

This cut represents a new pattern of iron fence, got up by Mr. Ebenezer Weeman. It is adapted to front yards, cemeteries, &c. It is a very elegant pattern, having the appearance as well as the reality of strength; and, at the same time, it is neat, and free from the heavy and clumsy appearance so common to many patterns of iron fence.

Mr. Weeman pays particular attention to the invention and construction of new and superior patterns of fences, balustrades, verandas, &c., specimens of which may be seen at his place, No. 18 Merrimac St. A specimen of this fence may also be seen at Mount Auburn, on Pine Avenue, lot No. 1290.

SEA-SICKNESS.

M. Currie, recently, in a paper read before the Paris Academy, has pointed out the cause of sea-sickness. He has shown that it depends upon the movement of the intestinal canal, which floats, as it were, in the abdomen. It descends with every movement of the vessel, and then, ascending, pushes up the stomach and the diaphragm. His theory, well explained, was well received, and Magendie and Keraudien gave their assent to it. But his remedy was thought more ingenious than practicable. It was to breathe in with every downward movement of the vessel, and expire the air with its ascent. What seemed more easy, and is known to be more effectual, is a horizontal position in the middle of the ship, and a tight bandage over the abdomen.

It is well known that the latter plan is very effectual to relieve sea-sickness, but it is not a good plan to pursue, after the first sea-sick bout is over. Active exercise, and frequent action on deck, soon drive away sea-sickness; and without this course is pursued, those liable to sea-sickness need not expect to get over it at all; they are liable to have it during all rough weather. — *Scientific American.*

CHICKEN POT-PIE.

Cut up and parboil a pair of large fowls, seasoning them with pepper, salt, and nutmeg. You may add some small slices of cold ham; in which case add no salt, as the ham will make it salt enough. Or you may put in some pieces of the lean of fresh pork. You may procure a suet paste; but for a chicken pot-pie it is best to make the paste of butter, which should be fresh, and of the best quality. — Allow to each quart of flour a small half pound of butter. There should be enough for a great deal of paste. Line the sides of the pot, two thirds up, with paste. Put in the chickens, with the liquor in which they were parboiled. You may add some sliced potatoes. Intersperse the pieces of chicken with layers of paste in square slices. Then cover the whole with a lid of paste, not fitting very closely. Make a slit in the top, and boil the pie about three quarters of an hour or more.

This pie will be greatly improved by adding some clams to the chickens while parboiling, omitting salt in the seasoning, as the clams will salt it quite enough. — *Miss Leslie's Receipt Book.*

WATER.

Several interesting experiments have been made by distinguished philosophers, showing the effects of pure water upon vegetation.

Mr. Bowles dried in an oven a suitable quantity of earth proper for vegetation, and after carefully weighing it, planted in it the seed of a gourd. He watered it with pure rain water, and it produced a plant which weighed fourteen pounds, though the earth producing it had suffered no sensible diminution.

A willow-tree was planted by Van Helmon in a vessel containing a thousand pounds of earth. This plant was watered with distilled water; and the vessel was so covered as to exclude all solid matter. At the end of five years, upon taking out the plant, he found it had increased in weight one hundred and nineteen pounds, though the earth had lost only two ounces of its original weight. — *Prairie Farmer.*

VALUE OF A LITTLE CHEMICAL KNOWLEDGE.

The last number of the American Farmer contains an interesting statement of the results of an experiment on the farm of the Hon. Reverdy Johnson, near Baltimore. The farm recently purchased by Mr. Johnson was completely exhausted, and the great question of the proprietor was this: What shall be applied to it in order to bring it to a state of fertility? In order to answer this question, common sense would dictate the Yankee rule of asking another question first, viz., What is lacking in the soil which causes its present barren condition? In order to ascertain this, chemistry must be called in. An analysis must be made. In order to illustrate the practical operation of this, we will extract from the communication the following statements: The land, originally good, had been impoverished by a long course of bad husbandry. The soil contains a very large proportion of iron. So complete was its exhaustion, that when first I saw it, all the vegetable matter growing upon the two hundred acres of cleared land, (including the briers, sassafras, and other bushes,) carefully collected, would have been insufficient for the manufacture of one four-horse load of barn-yard manure. The field selected for experiment contains ten acres, embracing the slopes of two hills, and a small valley intersecting it diagonally. It was at that time in corn, and did not produce one peck of corn to the acre, although it had been cultivated in the usual manner, and with ordinary care, and the season had not been below the average of seven years.

An analysis of the soil was made by Dr. Stewart. He found it to contain the following ingredients: —

Sand and bases insoluble,	71.20
Lime,	0.30
Magnesia,	0.40
Manganese,	0.10
Potash,	0.23
Water and organic matter,	10.07
Phosphoric acid, none.	
Iron and alumine,	17.70
	100.00

The doctor remarks, that from this analysis, the soil contains as much lime and magnesia as could be furnished by a dressing of one hundred and fifty bushels per acre — an uncommon quantity of iron. As there was a lack of phosphates, he recommended a preparation composed of biphosphate of lime. — This is obtained by dissolving bones in sulphuric acid; bone dust is similar in its effects — a part of the lime being combined with carbonic instead of sulphuric acid.

The corn was accordingly cut off and removed, the field ploughed and harrowed, and laid off into sixteen and one half feet lands. The preparation was then scattered regularly over it, costing, all told, $10 per acre. One and a quarter bushels of Mediterranean wheat was then sown upon each acre, and harrowed in. No barn-yard or other manure was used. The yield was more than twenty-nine bushels per acre!

Is not this a triumph of science, as applied practically to the renovation of exhausted land? — *Exchange.*

POMOLOGICAL.

The exhibition of fruits on Thursday, at the Pomological Convention, surprised every body in the variety and excellence of the specimens — a result due, in a very great degree, to Mr. J. Battey, of the Union Nurseries, Keesville, N. Y., and Mr. Chauncey Goodrich, of Burlington. Mr. Battey exhibited eighty-one varieties of pears, seventy-five of apples, and several of grapes; among the latter, the McNeil grape, which is regarded as the best for this climate, being perfectly hardy. Mr. Goodrich exhibited sixty-six varieties of apples, twenty-two of pears, one of quinces, and one of grapes. Among the contributors were also Mr. Pinneo, of Hanover, N. H.; Messrs. Judkins and Perkins, of Weathersfield; Mr. Chapman, of Middlebury; Col. Green, Mr. Curtis, and Mr. Atwood, of St. Albans; Mr. Landon, of South Hero; Mrs. R. G. Cole and Mrs. Z. Thompson, of Burlington; and Mr. Spear, of Braintree. Col. Jewett, of this village, presented specimens of the Fameuse apple as good as ever raised elsewhere.

The variety of native fruits of Vermont was better, altogether, than generally anticipated, and promises to furnish some excellent kinds unknown elsewhere. On the whole, the result was highly gratifying, and doubtless gave a new impulse in the right direction. Of a portion of Mr. Battey's fruit we could speak authoritatively, if we had time and room; but suffice it now to remark, that whoever wishes to find either old or new varieties, suited to the climate and soil of Vermont, will be able to find them in Mr. B.'s nurseries. Probably the nurseries of Messrs. Battey, of Keesville, Pinneo, of Hanover, and Spear, of Braintree, can furnish all the fruits now known which will flourish in this climate. — *Montpelier, (Vt.) Watchman.*

SWEET POTATOES.

Having been for some time an interested reader of the agricultural department of the Dollar Newspaper, I have thought that it may not be unprofitable to offer, through your columns, some suggestions, together with a little practical experience, relative to the culture of the sweet potato in comparatively northern latitudes. All may not deem it a matter of such importance, or think the vegetable so great a luxury as myself; but those who do will consider themselves more than compensated for the care and attention necessary for their production. — Sweet potatoes can be grown in perfection as far north as latitude 42°, and probably farther, by carefully pursuing the following directions: One of the most difficult parts of the process is preserving the seed through the winter. It will not do to put them in a cellar that never freezes, for the dampness of a common cellar is as fatal as the frosts of winter. To obviate this, the smaller potatoes are selected, (because they are more hardy, and not so liable to rot as the larger ones,) and packed perfectly dry in a box, with sand also perfectly dry. If sand cannot be obtained entirely free from moisture, it should be rendered so by means of fire heat, and the box containing them should be kept in a dry, warm room. In the spring, we must not wait till the ground is warm, and then plant the potatoes where they are to be grown, as is done at the south; but in the latter part of March, fill a box to the depth of one and a half or two feet with fresh horse stable manure, and spread over it three or four inches of rich, loose earth, and in this plant the potatoes close together, for the purpose of raising *plants*. This bed should be exposed to the sun in the daytime, and covered with a cloth or blanket at night to keep off the frost. About the 10th of May, the plants will be of sufficient size, and, as soon as there is no more danger from frost, may be transplanted to the ground where we wish to grow the potatoes. The manner of preserving the seed during winter, and preparing the hotbed to furnish the plants, I give on the authority of a neighbor of mine, who pays great attention to

gardening, and furnishes the "region round about" here with sweet potato plants, at twenty-five cents per hundred. My experience on the subject is this: Last spring, about the 20th of May, I selected a corner of my garden, lying considerably inclined towards the south-west, the soil of which is a dry and somewhat sandy loam, and threw it up in hills ten inches in height, and three feet apart each way. I procured two hundred plants, and set them out, two plants, six or eight inches apart, on each hill. There was a gentle rain about the time of setting them out, so that not more than a half dozen of them died. I hoed them twice, taking care to keep the hills perfect by replacing as much earth as was drawn away in hoeing up the weeds. This was all the care I bestowed on them, except going through them once in the month of August, and lifting the vines, to prevent their attachment to the ground, forming potatoes in other places than the hills.

We have been digging and using the potatoes for more than a month past, so that I have not measured the whole product; but by counting some of the hills, and measuring the potatoes obtained from them, I found ten to twelve hills would yield a bushel; consequently at a fair estimate, the product of one hundred hills, set out with two hundred plants, would be eight or ten bushels of good, dry, and mealy sweet potatoes, as large and as good as any that have for years past been brought to our market from the south, and sold for $1 to $1 25 per bushel. A great proportion of those I raised will exceed a foot in length, and several measure ten or twelve inches in circumference.

FRANKLIN.

Will Co., Ill., 1850.
— *Dollar Newspaper.*

COAL ASHES AS A MANURE.

I noticed in No. 50, vol. v., of the Scientific American, an article headed "Hard Coal Ashes," which goes strongly against the use of that article as a manure, which, in my opinion, is not well founded, as a general thing, as I know by experience, and also from observation, that it is beneficial on some kinds of soil. In the spring of 1849, I applied fifty bushels of hard coal ashes to a lot of ground fifty by one hundred and fifty feet, my neighbors telling me at the time that I would burn it up, particularly if it was a dry season, which it proved to be; but instead of burning it up, my trees and vegetables grew most luxuriantly, and at the same time their gardens were mostly dried up. Last spring I planted apricot, peach, and other fruit-trees in the same lot, some of which have grown shoots from four to five feet already, and are still growing very fast — one of the peach-trees producing ripe fruit of first-rate quality. In 1847, I saw hard coal ashes applied to a part of a field of corn, which was at least a third better than that on which there was none used; and again, on the first of August, I happened to see a large heap of hard coal ashes in my brother's garden, in Reading, Pa., on which there were corn and cucumbers growing as thrifty as I have ever seen them, and that too where there was nothing but the ashes. The lots referred to above were of a gravelly nature

GEORGE W. LEE.

Erchildown, Chester Co., Pa., 1850.

The article to which friend Lee refers states a positive fact; but there might be some other cause of the failure of the crop, than the coal ashes, although none could be adduced. Here, however, we have Mr. Lee's experience, and it is just such experience as we like to publish, because it is useful, and can be depended on. As there are hundreds of thousands of tons of coal ashes thrown away every year, we hope Mr. Lee and others will give us the results of their future experience with them, for this is something which concerns the whole country. — *Scientific American.*

ETRURIAN WHEAT.

The superiority of Etrurian wheat is so well established by six years' culture here, that I deem it proper to give some little account of its history. Its history, so far as I am acquainted with it, is as follows: —

Six years ago, I was at Washington, and Mr. Ellsworth, then commissioner of patents, called my attention to a new variety of wheat from abroad, that he had for distribution. Its appearance was so attractive, that I obtained about one large spoonful of it, that I sent home and had carefully cultivated, from which I have obtained my present supply. — Each crop has been equally successful. It has grown entirely free from chess, smut, rust, and weevil. The straw is stiff, and not subject to crinkle. Just previous to ripening, the straw assumes a beautiful purple color, which changes in ripening to a golden yellow. It is the bald variety, with a white or very light yellow berry, enclosed sufficiently firm by the husk to prevent waste in harvesting, and not so tightly set as to thresh hard. It is very hardy to stand the winter, and grows as well in the wet and low lands, apparently, as on the more elevated and drier grounds.

For flouring, this wheat is unsurpassed by any variety. It yields more pounds per bushel, measured, than any variety I know of, and the yield of flour is proportionably large. It promises fair to prove the most valuable variety of wheat that we ever had in this section of the country.

E. CORNELL.

Ithaca, *July*, 1850.
— *American Agriculturist.*

FOWL EXHIBITION.

There was quite a fine show of fowls at this place on Thursday last, there being nearly two hundred choice birds exhibited. The most prominent of these were the Shanghaes, of which there were a number of very large size, and young ones, which bid fair to become a good deal larger. This breed of fowls, though ungainly in appearance, are excellent layers, hardy, and particularly desirable for the quietness of their disposition and their early maturity. There were also present some good specimens of the Cochin Chinas, Dorkings, Polands, Pheasants, Javas, Chittagongs, Malays, Boltons, Bantams, and other varieties. There were also several cages of beautiful doves, such as the Dutch Tumblers, Ruffs, Fan-tails, Blowers, Turbans, Bald-head Tumblers, &c. These were in great variety, and most beautiful variegated colors; some with neck dresses and head ornaments that any lady might envy, desire to vie with, and imitate, but could not excel.

According to the accounts given of these various fowls by their owners, they are, some of them at least, very great layers and eaters, and gave satisfactory evidence of being very noisy birds. This exhibition has shown what improvement this department is susceptible of, both as to beauty and utility. — Whether the benefit or profit of the new breeds over the "old natives" is more than the additional expense of procuring them, we have our doubts; but to

those who take pleasure in mingling the beautiful with the useful, and who wish to adorn their yards and grounds, and give home new attractions, these newly-imported rarities offer a fine chance. — *Farmers' Cabinet, Amherst, N. H.*

MECHANICAL IMPROVEMENT OF SOILS.

There are two modes of improving soils. I have spoken of the composition of soils. You see how they vary, and what differences there are in the qualities of soils, and what it is that constitutes equality of soil, and what the relation between these and the chemical composition of soils. But how are soils to be improved? There are two methods, the mechanical and the chemical. Of the mechanical method I shall now speak, and of the chemical in my last lecture. Among the various mechanical methods of improvement, there are three principal kinds. The first is deep ploughing; that, in almost all cases, is found to be important and profitable. In all countries where I have been, in all parts of Europe which I have visited, experience has shown that the soil generally is not ploughed to a great depth: three, four, or five inches, is almost the maximum depth of exhaustion. It is very often the case, that persons exhaust land, until they can raise no more crops, and are then compelled to leave. The person who succeeds them, seeing the system of tillage that has been practised, instead of adopting the former system of shallow ploughing, goes down deeper, and turns up a new soil altogether. Very likely in this new soil are found accumulated the materials which the other soil once contained. The manure that has been put on and accumulated below is turned up, and the new comer gets, perhaps, not only a good virgin soil, but much of the money that the old farmer has buried there. This is no hypothetical case. If it were, I would not state it, for speculation and hypothesis are good for nothing. In the neighborhood of Edinburgh, there are farmers of the greatest skill, and who make a great deal of money; and, as a general rule, you may judge of the skill of a farmer by the number of sovereigns that he has pocketed at the end of the year; it is a very good test. One of these farmers, after hearing one of my lectures, in explanation of this simple principle, told me, that, though he lived so near Edinburgh, the thing had never occurred to him before, nor had he ever heard of it; and he immediately went to work to carry out the principle, and, by ploughing down, he had brought to the surface a fresh soil, and was then growing luxuriant crops, where he had thought the land entirely exhausted. Therefore, it is quite true, that in the under, or subsoil, there accumulate many substances which have drained through from the upper soil, which make it fully as rich as the upper soil once was, and that the farmer takes the cheapest steps to reclaim poor land, exhausted by severe cropping, who ploughs deep.

This must be sufficient to show the value of the subsoil, when turned up and mixed with the upper. I need not dwell on this; but I have this remark to make. It happens sometimes that various substances accumulate beneath, which are injurious to the plant, and in order that they may not injure the upper soil, it is not always advisable to bring them up. There are districts, in my country, where the subsoil is a white clay, which is so barren, that if brought up, it might destroy the upper soil, and therefore it is carefully avoided. This is the case in many parts of the world. It is quite proper not to do so; but not an unfrequent resort with us, as a means of deepening the soil, where the subsoil is impervious or noxious, is to cut it through, so that the water sinks, and as it sinks below the level of the soil, the rain falls, filling up all the pores in the soil to a certain point, which, with the fresh air, effects a chemical action on these substances, changes them chemically, and gives them either a nourishing quality, or modifies the subsoil, so that, when brought up, it will not be injurious, or noxious to plants.

This is the object of subsoil ploughing; this is common in England, after draining in stiff clay soils. But the practice is also adopted where the land has been long drained. In Scotland, the farmers plough from seven to twenty inches deep, and experience has shown that lands thus treated not only retain every thing put on them in the form of manure, but are capable of growing crops for a longer time, without exhaustion, than if they did not plough so deep. — *Johnston's Lectures.*

THE FRUITFUL BEES.

Messrs. Editors: I find in page 39, No. 1, vol. ix., of the Prairie Farmer, an article headed "Fruitful Bees." A Mr. Nelson Soule, in Yankee Settlement, Iowa, should have been Steele. It is a fact, that ten swarms sprung from one, in one season; the old swarm made eleven. That terrible long story can be seen through with a small telescope by a good mathematician or astronomer. It is this: the old stock swarmed four times, one of them swarmed three, another two, another one. According to my arithmetic, four, three, two, and one, together with the old stock, make eleven. He has had sixteen swarm from six, this season. He makes his hive to hold about a bushel, which is sufficient to hold eighty pounds of honey. Hives of that size will throw out a swarm of from ten to fourteen quarts of bees, and more swarms than larger hives. A good plan for a hive: Take boards twelve and fourteen inches wide, which will make it one foot square on the inside; two feet high, with a partition six and a half inches from the top for boxes; put in two in each hive; bore the hole in the partition, and bore so far as to meet each other; a box five inches square and eleven long in the inside, will hold ten pounds of nice honey. I have tried it, and you may. Have your door in the back side of the hive; then you can take out a box at any time; bore a hole in front of the box so as to see when it is full, put a glass over it, slide a piece of tin under the box, and draw it out and replace with another, and the work is done without destroying the bees.

A LOVER OF GOOD HONEY.

York, Delaware Co., Iowa.

— *Prairie Farmer.*

The great palace of glass for the Great Industrial Exhibition of 1851 is now being constructed. We believe we have already given the dimensions of this enormous structure, but the following brief summary will be perused with interest: The building is designed by Mr. Paxton. Its length is 1848 feet, width 408 feet, height 66 feet. The transept is 108 feet high; except the timbers for floors and joists, it consists entirely of glass and iron. There will be 3230 iron columns, 2244 iron girders, 1128 iron bearers, and 358 iron roof-supporters; 34 miles of gutters, 202 miles of sash bars, and 900,000 feet of glass. — The gallery will be 24 feet wide. The site covers 18 acres. The exhibiting space is about 21 acres, which can be greatly increased by additional galleries. The contract with Messrs. Fox and Henderson is for £79,800, or £150,000 if the building is permanently retained. — *Exchange.*

PLUM CULTURE—THE CURCULIO.

An Imperial Gage plum-tree on my premises has annually produced a good crop for the last five years, while four Red Egg plum-trees, on the same ground, have given only one good crop during the same period — the curculio destroying the Egg plum four seasons. The reasons for this difference are, the curculio has a preference for the Egg plum; it is also rather a shy bearer. The Gage is so prolific, that if it ripens half its crop there is a fine show of fruit.

There are probably other varieties of plums equally desirable as escaping the curculio. It would be well for plum culturists to give some attention to this point. We may succeed in making head against this troublesome pest by growing prolific sorts, so as to share the crop, and by planting, occasionally, in the plum orchard, such fruits as have proved to be peculiarly attractive to the enemy, thereby drawing their attention somewhat from the main point, or tempting them to a smaller share, where despatching may be more convenient. A few nectarine trees would be the most attractive. I have not been allowed to gather a ripe nectarine from a tree that has been perfectly loaded with fine-looking fruit three or four different seasons.

S. MOULSON.

Rochester, *Aug.* 1850.
— *Rural New-Yorker.*

TREES, SHRUBS, FLOWERS.

It is a fact, admitted by all gardeners, as well as botanists, that if a tree, or plant, or flower, be placed in a mould, either naturally or artificially made too rich for it, a plethoric state is produced, and fruitfulness ceases. In trees, the effect of strong manure and over-rich soil is, that they run to superfluous wood, blossom irregularly, and chiefly at the extremities of the outer branches, and almost, or entirely, cease to bear fruit.

With flowering shrubs and flowers, the effect is, first, that the flower becomes double, and loses its power of producing seed; next, it ceases almost to flower. If the application of the stimulus of manure is carried still further, flowers and plants become diseased in the extreme, and speedily die; thus, by this wise provision of Providence, the transmission of disease (the certain consequences of the highly plethoric state, whether in plants, animals, or in mankind) is guarded against, and the species shielded from danger on the side of penalty. In order to remedy this state when accidentally produced, gardeners and florists are accustomed, by various devices, to produce the opposite or plethoric state they peculiarly denominate "giving a check." In other words, they put the species in danger in order to produce a corresponding determined effort of nature to insure its perpetuation — and the end is invariably attained. Thus, in order to make the fruit-trees bear plentifully, gardeners delay, or impede, the rising of the sap, by cutting rings in the bark around the tree. This, to the tree, is the production of a state of depletion, and the abundance of fruit is the effort of nature to counteract the danger. The fig, when grown in this climate, is particularly liable to drop its fruit when half matured. This, gardeners now find, can be prevented by pruning the trees so severely as to give it a check; or, if grown in a pot, by cutting a few inches from its roots all round, so as to produce the same effect. The result is, that the tree retains, and carefully matures its fruit.

In like manner, when a gardener wishes to save seed from a gourd or cucumber, he does not give the plant an extra quantity of manure or warmth. He does just the contrary; he subjects it to some hardships, and takes the fruit that is the least fine-looking, foreknowing that it will be filled with seed, whilst the finest fruit is nearly destitute. Upon the same principle, it is a known fact, that after severe and long winters, the harvests are correspondingly rapid and abundant. Vines bear most luxuriantly after being severely tried by frost; and grass springs in the same extraordinary manner. After the long and trying winter of 1846–7, when the snow lay upon the ground in the northern counties until June, the spring of grass was so wonderful as to cause several minute experiments by various persons. The result was, that in a single night of twelve hours the blade of grass was ascertained frequently to have advanced full three quarters of an inch; and wheat and grain progressed in a similar manner.

Aware of this beautiful law of preservation, the florist, when he wishes to insure the luxuriant flowering of a greenhouse or hothouse shrub or plant, is followed invariably by an effort of nature for its safety, and it flowers luxuriantly, and, if a seed-bearing plant, bears seed accordingly.

There is another curious modification of this law exhibited by the vegetable creation; and this is, that immediately before the death, or sudden cessation of fruitfulness, of a tree or shrub, it is observed to bear abundantly. This is remarkably the case with a pear and apple, when the roots touch the harsh, cold, blue clay, or any other soil inimical to the health of the tree. It is a last effort to preserve and perpetuate the species, and is the effect of that state of depletion through which the tree passes to sterility and death. — *Doubleday.*

Remarks. — In the preceding article, there is a mistake as to the effect of ringing. The sap rises in the sap-wood, and after becoming digested in the leaves, and forming nutritious juices, it returns in the inner bark, and furnishes food to all parts of the plant, fruit and all. The object of ringing is to prevent the return of food to the plant generally, and form it into fruit. By this operation, the branch that is rung will produce superior fruit, but other parts of the tree suffer by it. Every branch should contribute to the support of the trunk and roots. — Ed. N. E. Farmer.

NEST-BUILDING FISHES.

Professor Agassiz delivered some oral remarks, at the late scientific convention, upon the care which certain fishes take of their young. Having alluded to the lower species of the fish, which lays its eggs, and leaves its young, who never know parents, and rise but to be swallowed by larger species, he said, that when he arrived in this country, he heard of fish that did protect their young, but could get no further information on the subject. The professor then proceeded to detail an incident which came under his own observation last May. When walking on the sea-shore at ———, he saw two catfish rushing from the shore to the water. He went to the place from which they started, and he saw a black mark formed where they had been. There were two tadpoles in it; and by-and-by he saw the two catfish return to the spot, and looking as if to see if their spawn had been disturbed. They got on their nests again. He watched them for a while, and threw a stone to disturb them. They ran to the water as before, but in ten minutes they returned again; and in this manner he disturbed them and they returned four times, which convinced him that they were anxious to return to their young and protect them. — *Granite Farmer.*

AGRICULTURE.

In few, if any, of the pursuits of life have there been more improvements made, or a deeper interest awakened, within the past few years, than in that of agriculture. It is well known that, until within a very recent period, the employment of farming was looked upon almost with contempt by nearly every person who had any ambition to attain an elevated position in the community. It was considered as a fitting employment rather for the dull and stupid, than for the ambitious man, or the man of taste and science; and, as is well known, in consequence of this feeling, it was almost impossible for farmers' sons, young men of energy and enterprise, to be retained upon the old homestead, to pursue the plodding course which their fathers had trodden before them.

But within the last dozen years, a great change in public opinion has been made in regard to this matter. It has been discovered that agriculture is in itself a science worthy the attention of the ablest minds; a science the thorough and practical understanding of which calls into operation more of the physical and mental powers of man than most any other, and which, rightly understood and practised, is one of the most ennobling to the mind and heart in which man can engage. It has also been made clearly manifest that the "farming" of by-gone days was not "*agriculture*," understood in its proper sense; that it was a perversion of the sense and meaning of the term, and that the principles of the science were almost unknown to those who called themselves farmers. To be sure, farmers then, as now, ploughed, planted, sowed, and reaped. If they got an abundant harvest, it was good luck; if their harvest failed, it was bad luck. Besides a few old women's whims, they had no reason to give, either for success in the one case, or failure in the other. The analysis of soils for the purpose of ascertaining their adaptation to a particular crop was unthought of. Chemistry, geology, botany, entomology, and zoölogy, with other sciences, were as sealed books to the farmer, and for the want of a knowledge of them the earth withheld her richest stores. But now these "sister sciences" have lent their aid to agriculture. The hidden treasures of the earth have been wrung from her sterile bosom, and the reward of the toils of the husbandman has been increased a hundred fold.

The contrast between the present and the past is indeed striking. The farmer of the present day who understands not the *science* of his calling, and cannot account for the different phenomena in the various departments, which in his every-day experience he encounters, is behind the age. The reasons which, a dozen years ago, husbandmen would have advanced and stoutly maintained for this success or that failure, they would now blush to own. Instead of being carried on in the dark, hap-hazard, the business is now conducted by the light of science, and in accordance with well-known principles. This is it which has raised the calling so much and so rapidly in public estimation — has caused it to be considered as an employment worthy the attention of the most cultivated and enlightened of the human race — and has made it so popular, that there is hardly a class in the community, from the highest to the lowest, the members of which are not often heard wishing most earnestly for the time to come when they can lay aside the vexatious cares of "business," and retire to their beau ideal of earthly happiness — "*a snug little farm.*"

A gratifying feature of this awakened interest in the improvement of agriculture is the fact that it is not confined to one state, or one section of the country, but extends in a greater or less degree to nearly all sections of our land. In the New England States, any one who has had occasion to travel for any distance cannot have failed to have discovered this improvement. In other sections of the country, it is doubtless as clearly perceptible. In New York, we know that much has been accomplished — that the state, with a praiseworthy liberality, has contributed liberally from her resources to improve and advance the cause of agriculture. Other states have done the same, and the good effect can be easily seen.

A writer truly remarks, that, "notwithstanding what has been accomplished, we are yet but in our infancy as to improvement." The work is yet to go on, until results will be attained, at which the faith of the most sanguine of the present day would waver. That this will be the case, we have no doubt; that it may be, and that with it the noble yeomanry of our land may be elevated to that position to which their calling entitles them, is a wish in which every class in the community ought most heartily to join. — *Boston Journal.*

REFINING SUGAR — NEW DISCOVERY.

A discovery has been made in the refining of sugar, of as much importance to domestic economy as any improvement that has been introduced during the last fifty years.

The sirup, or common brown sugar, is taken from the boilers, and again mixed with molasses, till it assumes a semi-fluid consistence, and in two minutes, without the use of heat or any drug, is refined into the state of the finest crusted loaf sugar. In the old process, the refining took nearly three weeks, together with a great expense of labor, fuel, machinery, and buildings.

This process, as we understand it, is simply admitting the sirup into a cylindrical sieve containing about two hundred pounds, the meshes of which are so fine that the crystalline particles cannot pass, and, giving it a rotary motion of about two thousand revolutions per minute; the centrifugal force drives off the liquid, and leaves the sugar pure, and, what is still more singular, dry enough for market.

The annual consumption of refined sugar in this country is more than a hundred millions of pounds. A saving of one penny per pound to the consumer would be a million of dollars per year.

The owners of this discovery, which has been patented, are Messrs. Aspinwall and Woolsey, of New York. The action of the discovery has been fully tested at Mr. Hartson's works, Vesey Street, New York, before a large number of practical and scientific gentlemen, when two hundred pounds of very impure sirup were perfectly converted into pure crystals of sugar in two minutes. These facts are condensed from the New York Sun. — *Rural New-Yorker.*

SHOEING HORSES.

It appears that the practice of shoeing horses was brought into England about the time of William the Conqueror. It is said that Welbeck, in Nottinghamshire, belonged to a Saxon chief named Gamelbere, who held it on condition of shoeing the king's palfrey, whenever he should lie at the manor of Mansfield, and that, if he should lame the palfrey, he should give the king another worth four marks. William the Conqueror is said also to have given the town of Northampton, as a fief, to a certain person, in consideration of his paying a certain sum yearly for the shoeing of his horses; and it is generally believed that Henry de Ferrers, who came over with William, and whose descendants still bear on their arms six horseshoes, received that surname because he was

intrusted with the inspection of the farriers. At what period horses' shoes, as we now have them, were introduced, is, like many other things, lost to us forever. Historians inform us that the Emperor Nero, when he undertook short journeys, was drawn by mules which had silver shoes, and those of his wife, Poppæa, had shoes of gold. But these shoes appear to have been a kind of plait of gold and silver stripes, covering the hoofs. About the year 1038, when the Marquis of Tuscany, one of the richest princes of his time, went to meet his affianced bride, (Beatrix,) his horses were shod with silver: the nails were of the same material. Yet in much more modern times, an English ambassador at the court of Paris had silver shoes to his horses, and caused them to be so slightly fixed that they soon came off. This appears to us, in the nineteenth century, extravagant folly, and scarcely to be believed; yet we have evidence of the truth of it. — *Farmer's Magazine.*

FARMING SCENES IN THE WEST.

About eight years ago, a Dutchman, whose only English was a good-natured "yes" to every possible question, got employment as a stable man. His wages, six dollars and board, that was thirty-six dollars in six months, for not one cent did he spend. He washed his own shirt and stockings, mended and patched his own breeches, paid for his tobacco by odd jobs, and laid by his wages. The next six months, being now able to talk good English, he obtained eight dollars a month; and at the end of six more, had forty-eight dollars; making in all, for the year, eighty-four dollars. The second year, by varying his employment, — sawing wood in the winter, working for the corporation in the summer, and making gardens in the spring, — he laid by a hundred dollars; and the next year, one hundred and fifty-five dollars; making, in three years, three hundred and ninety-nine dollars. With this he bought eighty acres of land. It was as wild as when the deer fled over it and the Indian pursued him. How should he get a living while clearing it? Thus he did it: he hires a man to clear and fence ten acres; he himself remains in town, to earn the money to pay for clearing. Behold him already risen a degree — he is an employer. In two years' time, he has twenty acres well cleared, a log-house and stable, and money enough to buy stock and tools. He now rises another step in the world, for he gets married, and with his ample, broad-faced, good-natured wife, he gives up the town, and is now a regular farmer. In Germany, he owned nothing, and never could own any thing; his wages were nominal, his diet chiefly vegetable, and his prospect was, that he would be obliged to labor as a menial for life, barely earning a subsistence, and not leave enough to bury him. In five years he has become the owner in fee simple of a good farm, with comfortable fixtures, a prospect of rural wealth, an independent life, and, by the blessing of Heaven and his wife, of an endless posterity. Two words tell the story — industry and economy. These two words will make any man rich. — *Indiana Farmer.*

THE WAY TO PULL TURNIPS.

The Yankee grasps the root by its top, and pulls it with his hand, and then cuts off the tops with a knife. The Englishman has a better way. He sharpens his hoe, and, passing along, cuts, with a single stroke, the tops of the turnip; then, with the same implement, strikes under it, so as to cut off the tap-root, and brings it out of the earth. In cutting off the tops, he guides his hoe so as to throw them into a sort of row in one place, and in digging, he guides it so as to throw the roots together in another row. He will dig the roots about four times as fast as one Yankee with his pulling and knife. — *Prairie Farmer.*

PRIZE HAM.

At the recent Agricultural Fair in Montgomery Co., N. Y., a prize was awarded to Nathan White for the best hams exhibited. His mode of curing is as follows: —

The pork should be perfectly cold before being cut up. The hams should be salted with fine salt, with a portion of red pepper, and about a gill of molasses to each ham. Let them remain in salt five weeks, then hang them up and smoke them with hickory wood for five or six weeks. About the first of April, take them down, and wet them with cold water, and let them be well rubbed with unleached ashes. Let them remain in bulk for several days, and then hang them in the loft again for use.

SHEPHERD DOGS.

Among the wonderful animals exhibited at the State Fair, says the Albany Journal, was Robert Middlemist's intelligent shepherd dog. He is a beautiful animal, and has performed many wonderful exploits. Among those which come strongly authenticated, was one where he had followed up a stray sheep, and after scenting him for a mile, found him among a flock of forty, picked him out unaided by any person, and, after a hard struggle, separated him from the flock, and drove him home. Mr. M. is an old Scotch shepherd, and his dog is one of the best from the Highlands. He attracted general admiration. — *Rural New-Yorker.*

Useful Method. — M. Mammere, the professor of chemistry at Rheims, has published a method of detecting cotton or linen in wool or silk goods. His method consists in applying to the stuff which is suspected a chloride of tin, (*chlorine d'étain.*) If there is in the stuff any linen or cotton, its presence is immediately indicated by their coloration in black, which they undergo under the action of the chloride of tin, while it has no action upon the wool or silk, this salt being without action upon animal substances. — *Maine Farmer.*

Mammoth Ox. — At the fair of the American Institute, New York, there is an ox supposed to be the largest ever known. He is purely of American stock, and will be exhibited at the approaching World's Fair in London. The animal is eight years old, 18½ hands high, and measures 14 feet in length, and 11 in girth.

ACKNOWLEDGMENTS.

Of Gen. Josiah Newhall, Lynnfield, a large apple, rather flat, dark red, very fair and beautiful; the quality about middling. Also, Oakes apple. We have heard different opinions, from fruit-growers in Essex county, as to the identity of the Fall Harvey and Oakes apple. But from these specimens, we

consider them entirely distinct; and Gen. Newhall considers this apple distinct from the Fall Harvey, which he also cultivates. Dea. Fowler, of Danvers New Mills, where the Oakes apple is cultivated, has examined these apples from Gen. Newhall, and he says that they are the Oakes apple, and different from the Fall Harvey. With these facts and opinions, we will consider this doubtful question settled. The Oakes apple is large; flat, and rather conical; bright yellow; very fair. Not yet in use. It is an early winter fruit, of good quality. The Fall Harvey is liable to objections, on account of its falling before ripe, or its liability to rot on the tree.

From William O. H. Gwynneth, Portland, Me., various kinds of apples. No. 1 is a fair fruit, of medial size, said to keep two years. No. 2, large, but not excellent. No. 3, large, fair, very tender, sweetish; pretty good. No. 4, medial size, handsome color, similar to Hurlbut in general appearance, mild sour, tolerably good. No. 5, large, fair, handsome, quite pleasant. No. 6, hard. No. 7, not good. No. 8 is the Pound Sweeting of New York; common in this market, from that state. It is a very good fruit, and sells well. Its large size is a good recommendation, as well as its quality. No. 9, Hubbardston Nonsuch, very fine specimens.

Of James Dorr, Dorchester, several varieties of apples. One is a very pleasant sour, of medial size, and very fair. A good sweet of the same size, fair and handsome. One variety looks so much like the Baldwin that it would readily be mistaken for that variety, but it differs in quality, being more mild and tender; and as it is an earlier fruit, it is superior at this season.

Of Calvin Haskell, specimens of the Mother apple; large, very fair and beautiful. This is one of the best of apples in quality.

From William Elliot, Greenfield, apples from a pear-tree of William Mitchell in that town. The fruit is fair, rather large, and of good quality. That tree has borne apples and pears for several years. Mr. Elliot's remarks on this tree may be seen in our first volume, p. 79. Also fine specimens of St. Michael pears and Baldwin apples.

Of G. I. Haywood, Hancock, N. H., apples for a name. They are the Holden Pippin, which had its origin in Holden, in this state. The tree is a great grower and bearer; the fruit large and fair; very good for cooking, and tolerably good for the dessert; it is very tender, but it lacks flavor, and is rather too acid for a first-rate table fruit.

From W. N. Andrews, Dover, N. H., specimens of the Size apple. We received a single specimen of this fruit from Mr. Andrews last spring, and we were much pleased with it for its fine appearance and long keeping; and we are much obliged for this favor, which will enable us to make a better test of this promising fruit. Also, large, handsome winter apples, of whose qualities we cannot judge now.

In our last, we acknowledged the receipt of apples from Cyrus K. Moore, Parsonsfield, Me., which should be from John Moore, West Parsonsfield.

AUTUMN AND WINTER.

BY FRANCES D. GAGE.

The Autumn is going, with its beauty so glowing,
And winter o'er all things is casting its pall;
The rose-tree is fading — no longer 'tis shading
The arbor of love or the bright waterfall.

The dahlias are lopping, the ripe fruit is dropping,
The corn-leaves are withered and dry on the stalk;
The ring-dove is sighing, the grasshopper dying,
The fire-fly no longer enlivens the walk.

The forests are changing, the wild birds are ranging,
To hunt out a home where the skies are more clear;
The streams deeper flowing, the chilly winds blowing,
All tell us that winter, cold winter, is near.

Summer's sweets, while we're tasting, away all are hasting;
The days of the peach and the melon are o'er;
Then let us be trying, while Autumn is dying,
To lay up for Winter a plentiful store.

Work freer and harder, fill the barn and the larder;
Then give to old Winter, whene'er he shall come,
A welcome most willing: we'll heed not his chilling,
If there's warmth round the hearth-stone, and plenty at home.

But while we are cheerful, no cause to be tearful,
Let us think of the children of sorrow and wrong,
And give from our treasure, with no stinted measure,
Of the good gifts of Heaven, to help them along.

—*Ohio Cultivator.*

THE OLIO.

THE GRANDEUR OF MAN. — "The birth of an infant," it has been truthfully said, "is a greater event than the production of the sun. The sun is only a lump of senseless matter; it sees not its own light; it feels not its own heat; and with all its grandeur, it will cease to be: but that infant, beginning only to breathe yesterday, is possessed of reason, claims a principle infinitely superior to all matter, and will through the ages of eternity." Let the immortal mind shed its lustre upon the world.

"How shall I stir the fire without interrupting the music?" asked some one. "Between the bars," was replied.

We notice the marriage of Mr. Day to Miss Field, which presents this singular anomaly, that although he *won the Field*, she *gained the Day*.

TERMS. — THE NEW ENGLAND FARMER is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be elegantly bound in muslin, embossed and gilt, at 25 cents a volume, if left at this office. As it is stereotyped, back numbers can be furnished to new subscribers.

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